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EXAMINER	
LE, THIEN MINH	

ART UNIT	PAPER NUMBER
2887	

NOTIFICATION DATE	DELIVERY MODE
11/14/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary	Application No.	Applicant(s)	
	10/523,646	SCHMIDT ET AL.	
	Examiner	Art Unit	
	THIEN M. LE	2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *17-20* is/are allowed.

6)☒ Claim(s) *1,2 and 4-9* is/are rejected.

7)☒ Claim(s) *3 and 10-16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The request for reconsideration filed on 7/25/2008 has been entered. Claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-2 and 4-9, are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al. (Kobayashi et al. – 6,014,649; herein after referred to as 'Kobayashi").

Regarding claims 1, 7-9 Kobayashi discloses the method for filling the money cassette comprising the steps of: (i) removing the cassette from the ATM (see figure 1); (ii) filling the money cassette (see figure 1); (iii) wherein the mobile cart 2 is a mobile charging station that can be transported among multiple ATM machines 1 (see figure 1). As can be seen, Kobayashi discloses the claimed invention. The following quotes that are relied upon are herein provided for further reviews:

Abstract

An ATM operation supporting system for managing the number of bills in a plurality of ATMs. The system includes a mobile cart, a counting section, and a control section. The mobile cart has a handling mechanism capable of installing a bill cassette into each ATM and removing the bill cassette from each ATM. The mobile travels to each ATM and installs and removes the bill cassette using the handling mechanism, thereby performing bill replenishment/collection operation for each ATM. The counting section counts the number of bills stored in the bill cassette which is directly or indirectly loaded onto the mobile cart by a clerk in charge. The control section controls the bill replenishment/collection operation performed by the mobile cart such that the numbers of bills in the ATMs are balanced. The ATM operation supporting system can manage the number of bills in an ATM, thereby realizing efficient utilization of cash as well as easing the operational burden on a clerk in charge.

Detail Descriptions

14) The periodical replenishment/collection function allows the control section 4 to constantly manage the number of bills currently being stored in each ATM 1, to periodically estimate the demanded number of bills in each ATM 1 on the basis of changes in the number of bills in each ATM 1, and to control the bill replenishment/collection operation performed by the mobile cart 2 in accordance with the demanded number of bills such that the numbers of bills in the ATMs 1 are balanced.

(15) By virtue of the above-described periodical replenishment/collection function, the ATMs 1 from which a larger amount of money has been withdrawn are periodically replenished with bills, whereas bills are periodically collected

from the ATM 1 which has received a larger mount of money. Eventually, the number of bills in each ATM 1 is constantly optimized. Further, it is possible to transfer bills among the plurality of ATMs 1 without taking bills in and out of a cashier's section. For these reasons, the amount of bills which remain unused in the ATM 1 is reduced, and it is possible to automatically optimize the amount of money in financial institutions such as a bank.

(16) In this way, the periodical replenishment/collection function makes it possible to constantly optimize the number of bills in each ATM 1 and to transfer the bills among the plurality of ATMs 1. As a result, the number of bills which remain unused in the ATM 1 is reduced, which in turn makes it possible to automatically optimize the amount of money in the financial institution such as a bank.

(17) The urgent replenishment/collection function allows the control section 4 to constantly manage the number of bills currently being stored in each ATM 1, and to control the mobile cart 2 so as to urgently carry out the bill replenishment/collection operation for the ATM 1 in which the number of bills currently being stored has reached the near-end number of bills which nearly run short or the near-full number of bills which nearly overflow previously set for each ATM 1. In this event, it is also possible to arrange the ATM operation supporting system in the following manner. Specifically, the control section 4 constantly manages the number of bills in the bill cassette 5 loaded onto the mobile cart 2. When the number of bills in the bill cassette 5 has reached the near-end number of bills/the near-full number of bills previously set for the mobile cart 2. In this case, the mobile cart 2 is controlled to carry out the bill replenishment/collection operation between the bill cassette 5 and the ATMs 1 capable of being subjected to the bill replenishment/collection operation, in such a way that the number of bills in the bill cassette 5 falls within the range between the near-end number of bills/the near-full number of bills set for the mobile cart 2.

(18) By virtue of the previously described urgent replenishment/collection function, it is possible to set the near-end number of bills/the near-full number of bills for each ATM 1 and to cause the control section 4 to monitor the number of bills in each ATM 1. As a result, it becomes possible to urgently replenish the ATM 1 with bills or collect bills from the ATM 1 using the mobile cart 2 before the ATM 1 enters the near-end/near-full state.

(19) Further, it is possible to constantly hold the appropriate number of bills in the bill cassette 5 loaded onto the mobile cart 2. Accordingly, even when the number of bills in an ATM 1 suddenly becomes close to the near-end number of bills/the near-full number of bills, it is possible to prevent that ATM 1 from going out of service due to entrance into the near-end/near-full state, because the ATM is replenished with bills from the bill cassette 5 or bills are collected from the ATM 1 to be stored in the bill cassette 5.

(20) As described above, the urgent replenishment/collection function makes it possible to urgently replenish the ATM 1 with bills or collect bills therefrom via the mobile cart 2 before the ATM 1 enters the near-end/near-full state. Further, the bill cassette 5 loaded onto the mobile cart 2 constantly holds the appropriate number of bills. Therefore, even when the number of bills in the ATM 1 suddenly becomes close to the near-end number of bills/the

near-full number of bills, it is possible to reliably prevent the ATM 1 from going out of service due to entrance of the ATM 1 into the near-end/near-full state, because the ATM 1 is replenished with bills from the bill cassette 5 or bills are collected from the ATM 1 to be stored in the bill cassette 5. Thus, it is possible to considerably reduce the out-of-service rate of the ATMs.

(21) When the number of bills in the bill cassette 5 loaded onto the mobile cart 2 is set from outside, the forced replenishment/collection function enables the control section 4 to control the mobile cart 2 so as to carry out the bill replenishment/collection operation between the bill cassette 5 and the ATMs 1 capable of being subjected to the bill replenishment/collection operation, such that the number of bills in the bill cassette 5 becomes equal to the preset number of bills. The previously described forced replenishment/collection function allows the clerk in charge to forcibly perform the replenishment/collection operation between the mobile cart 2 and the ATMs 1 which are currently operating.

(22) As described above, the forced replenishment/collection function allows the clerk in charge to forcibly execute the bill replenishment/collection operation between the mobile cart 2 and the ATMs 1 which are currently operating, which contributes to a reduced burden on the clerk and the reduced amount of money to be set in the ATM.

(23) The control section 4 determines the order in which the mobile cart 2 carries out the bill replenishment/collection operation for the ATMs 1, based on the result of judgment as to whether to execute the replenishing operation or the collecting operation, the number of bills to be used in the replenishment operation or collected by the collection operation, and the type of bills to be used in the replenishment operation or collected by the collection operation. In the case where there exist a plurality of bill cassettes 5 usable for the bill replenishment/collection operation, the control section 4 determines a bill cassette 5 to be used for the bill replenishment/collection operation for each ATM 1, based on the result of judgment as to whether or not the number of bills in each bill cassette 5 has already been counted, the result of judgment as to whether or not the bill cassette 5 has already been loaded onto the mobile cart 2, and the number of bills in each bill cassette 5.

(24) The order in which the mobile cart 2 performs the bill replenishment/collection operation for the ATMs 1 is determined on predetermined criteria, and when a plurality of bill cassettes 5 exist, a bill cassette 5 to be used for the bill replenishment/collection operation is determined. As a result, the bill replenishment/collection operation can be efficiently carried out.

(25) In the case where the bill replenishment/collection operation is carried out using the mobile cart 2 as described above, the ATM operation supporting system may be arranged such that after the bill cassette 5 has been installed into the ATM 1 to be subjected to the bill replenishment/collection operation, the mobile cart 2 closes the automatic door of the ATM 1, and at the same time with this, the ATM 1 counts the number of bills in the bill cassette 5.

(26) In this way, as a result of the closing of the automatic door on a rear

side of the ATM 1 and the counting of the number of bills in the bill cassette 5 being simultaneously carried out, a subsequent operation can be executed before one operation has been completed, which makes it possible to reduce replenishment/collection time.

(27) By virtue of the closing of the automatic door of the ATM I and the counting of the number of bills in the cassette 5 being carried out simultaneously, a subsequent operation can be executed before one operation has been completed, which makes it possible to reduce replenishment/collection time. As a result, it becomes possible to considerably improve system performance.

(28) In this event, the control section 4 controls the mobile cart 2 such that when the counting of the number of bills and the bill replenishment/collection operation are performed in the ATM 1, the bill replenishment/collection operation are performed for another ATM 1 simultaneously.

(29) When at least two bill cassettes 5 are loaded onto the mobile cart 2, it becomes possible to simultaneously perform the bill replenishment/collection operation for two or more ATMs 1. It becomes possible to start the bill replenishment/collection processing for the second ATM 1 before the completion of the replenishment/collection processing for the first ATM 1, which makes it possible to reduce the replenishment/collection time to a much greater extent.

(30) By performing replenishment/collection processing simultaneously for two or more ATMs 1, it becomes possible to reduce the replenishment/collection time as well as to improve the system performance to a much greater extent.

(31) In the case where the counting function of the ATM 1 is used as the counting section 3, the ATM operation supporting system may be arranged in the following manner. Specifically, the ATM operation supporting system is provided with a cassette station which consists of the plurality of bill cassettes 5 which are to be loaded onto the mobile cart 2 or unloaded from the mobile cart 2. The handling mechanism 6 of the mobile cart 2 which has travelled to the cassette station transfers the bill cassettes 5 between the mobile cart 2 and the cassette station. The control section 4 grasps whether or not the number of bills in each bill cassette 5 retained in the cassette station has been determined. When there exists a bill cassette 5 holding bills the number of which has not been determined yet, the mobile cart 2 is controlled so as to load that bill cassette 5 into one of the plurality of ATMs 1. The number of that bill cassette 5 is determined by means of the counting function of the ATM 1. In this case, when the number of bills in the bill cassette 5 is counted in the ATM 1 so as to determine the number of the bills, the control section 4 controls the mobile cart 2 so as to perform the bill replenishment/collection operation for the ATM 1.

(84) When the automatic door 11D of the ATM 11 is opened, the key rotating unit 75 releases the automatic door 11D from a locked state by inserting the door key (not shown) into the door key slot 11c of the ATM 11 and rotating the thus inserted door key in the manner as previously described with reference to FIG. 4.

(85) When the bill cassette 22 is removed from and inserted into the ATM 11, the bill cassette insert guide unit 76 guides both sides of the bill cassette 22 which is substantially vertically moved by the cassette withdrawing/inserting unit 73.

(86) Storages 77 are disposed on the automated guided vehicle 50A so as to be movable in the Y direction. The storages 77 are temporarily hold the bill cassettes 22 to be transported by the mobile cart 50. Each of the storages 77 is moved in the Y direction so as to come in alignment with the handler 72. Then, the cassette withdrawing/inserting unit 73 is vertically moved. As in the case of installing the bill cassette 22 into and removing it from the ATM 11, the bill cassette 22 is installed into, or removed from, the storage 77. The two storages 77 are disposed on the automated guided vehicle 50A of the present embodiment, and hence the two bill cassettes 22 can be stored in the mobile cart 50.

Regarding claim 2, see the discussions regarding claim 1. Further, Kobayashi discloses the method of replacing the ATM's cassette with the mobile charging cart's cassette that would embrace all limitations set forth in this claim.

269) Replenishment/Collection Operation

(270) During the course of the operation of the ATM operation supporting system of the present embodiment, the mobile cart 50 opens the automatic door 11D of the ATM and **replaces the ATM cassette with the mobile cart cassette**. At this time, when the processing for counting the number of bills stored in the mobile cart cassette 22 is performed, it takes about several minutes to tens of minutes [see, for example, FIG. 19(a)]. When power supply problems, such as a power failure, arise while the door 11D of the ATM is open, the power supply section 54B of the STC 54 which feeds electric power to the mobile cart 50 is switched to battery backup. When the battery is fully discharged, the door 11D of the ATM remains open.

Regarding claims 4-5, see the discussions claim 2. Further, the step of replacing the second ATM's cassette with the first mobile cart's cassette is considered inherent in the various operation possibilities of Kobayashi's system. For instance, the operator can chose to replenish the cassette at the first ATM machine since it is almost full. The operator then goes to the second ATM machine wherein the cassette is almost emptied so it would be faster to replace it with a new and full cassette from the cart.

Regarding claim 6, the number of bills stored in the money cassette is counted by the bill counting section and thus would embrace all limitations set forth in this claim.

Allowable Subject Matter

Claims 17-20 are allowed.

Claims 3, 10-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art disclose the mobile replenishing/collecting station for ATM machines. However, the prior art fails to disclose the specific locks for the money bundles in the manner as recited in claims 17-20. The prior art fails to disclose the method of filling the money cassette by money bundles in the manner as recited by claim 10. The prior art also fails to disclose the specifics of claims 3, 12-16.

Remarks

Applicant's arguments filed on 7/25/2008 have been fully considered but are considered partly persuasive.

Regarding claims 1, applicant's arguments regarding this claim is not considered persuasive, since claim 2, required the same features that Kobayashi reference teaches (the swapping of first cassette between the mobile cart and the ATM machine). Further, limitation of claim 4 is just how Kobayashi's teachings would read directly on the claimed invention of claim 1.

The examiner respectfully agrees with applicant's argument in light of claim 3, in that the first cassette, after being filled in the mobile station, **is again inserted into the first automatic teller machine.**

Applicant's has not argue the allowability of claims 2-9, with the exception that the rejection with respective to claim 3 is withdrawn, their grounds of rejection are respectfully maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THIEN M. LE whose telephone number is (571)272-2396. The examiner can normally be reached on Monday - Friday from 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve S. Paik can be reached on (571) 272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thien M. Le/

Primary Examiner, Art Unit 2887